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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 01/20/2010 have been fully considered but they are not persuasive.

2. First, the Examiner inadvertently misquoted the numbers of Kauranen and Park in the rejection of claims 42, 43 and 56, and thanks the Applicant for pointing the error. It is corrected in this correspondence. Secondly, Applicant's arguments revolves around the fact that transmitted multiple PLMNs are not shown in the prior at, mainly Kauranen; Examiner disagrees with applicant's assertion. Kauranen clearly discloses that "***In the network sharing scenario of FIG. 2, the shared RAN 210 may broadcast the PLMN (Public Land Mobile Network) identity "X" to the terminals, i.e. depending on its capabilities; the terminal may not see the identities of the different Core Network operators. However, it is also possible that the operators have dedicated radio frequencies, whereby they can transmit their own Mobile Network Codes (MNC) on their dedicated carriers***". As the underlined indicates, the radio access network is a shared one, meaning that more than one plurality of core network is present, thus, more than one PLMN is transmitted to the mobiles and that an individual mobile in this system may not see the identities of the core networks but this does not mean that more than one network identity is presented to the mobiles of the system. Also the Applicant is pointing to Park et al in order to argue that the limitation is not taught. However, the Examiner has relied on Park in order to teach the missing limitation of "the PLMN identity is being transmitted in the Master Information Block (MIB) or in System

Information Block 1 (SIB1), or in a mobile radio system operating according to the GSM standard on the System Information Type 3 (SI3)" which the applicant has now canceled. In fact, the Examiner is relying on Kauranen in order to show the limitations of "transmitting more than one mobile radio operator identity, PLMN identity, on a single organization channel BCCH" and "transmitting the more than one PLMN identity in a mobile radio system" not Park et al. (b) Further, Kauranen shows a network as shown in FIG. 1 may be shared by several operators, for example as is shown in FIG. 2. In this case, a common RAN 210 can be shared by three different operators, A, B, and C, each operating a Core Network of its own (Core Networks 220, 221, and 222, respectively). All the Core Networks can be connected to the same RNC of the shared RAN. In the network sharing scenario of FIG. 2, the shared RAN 210 may broadcast the PLMN (Public Land Mobile Network) identity "X" to the terminals, i.e. depending on its capabilities; the terminal may not see the identities of the different Core Network operators. However, it is also possible that the operators have dedicated radio frequencies, whereby they can transmit their own Mobile Network Codes (MNC) on their dedicated carriers (see paragraph 40). Therefore, Examiner contends that the combination of references read upon the limitations of "transmitting more than one mobile radio operator identity, PLMN identity, on a single organization channel BCCH" and "transmitting the more than one PLMN identity in a mobile radio system". Regarding claims 32 and 33, Kauranen shows that a network as shown in FIG. 1 may be shared by several operators, for example as is shown in FIG. 2. In this case, a common RAN 210 can be shared by three different operators, A, B, and C, each operating a Core Network

of its own (Core Networks 220, 221, and 222, respectively). Thus reading upon the claims; see also figure 1; element 124. Regarding claims 38, 39, Kauranen shows that he Radio Resource Control (RRC) handles the signaling over the Uu interface and the Radio Access Network Application Part (RANAP) handles the signaling over the Iu interface. Regarding claim 40, Kauranen et al show a UMTS system as being used in order to transmit more than one mobile radio operator identity. Regarding claims 41, 42, 43 and 46, Kauranen shows the Core Networks can be connected to the same RNC of the shared RAN. In the network sharing scenario of FIG. 2, the shared RAN 210 may broadcast the PLMN (Public Land Mobile Network) identity "X" to the terminals, i.e. depending on its capabilities; the terminal may not see the identities of the different Core Network operators. However, it is also possible that the operators have dedicated radio frequencies, whereby they can transmit their own Mobile Network Codes (MNC) on their dedicated carriers (see paragraph 40). Therefore, Examiner contends that the combination of references read upon the limitations of "transmitting more than one mobile radio operator identity, PLMN identity, on a single organization channel BCCH" and "transmitting the more than one PLMN identity in a mobile radio system". Regarding claim 53, Kauranen shows a common RAN 210 can be shared by three different operators, A, B, and C, each operating a Core Network of its own (Core Networks 220, 221, and 222, respectively). All the Core Networks can be connected to the same RNC of the shared RAN. In the network sharing scenario of FIG. 2, the shared RAN 210 may broadcast the PLMN (Public Land Mobile Network) identity "X" to the terminals, i.e. depending on its capabilities; the terminal may not see the identities of the different

Core Network operators. Regarding claims 59, 61, 60 and 62; Park et al is used to show the limitations as described previously on columns 21 and 22, lines 66-67 and 1). Therefore, the earlier rejection is maintained by the Examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 30-41, 44-55 and 57 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication Number 2004/0162077 (Kauranen et al.).

4. Regarding claims 30, 33, 34, 41 and 49, Kauranen teaches a method for providing or sharing or jointly using a mobile radio access network by several mobile radio providers **[Figure 2, RAN # 210 and core network operators 220, 221 and 222**

], comprising the steps of providing a single radio access network for jointly use by several mobile radio providers **[Figure 2, RAN # 210]**, wherein for differentiating between a core networks of the different mobile radio providers, the respective identity of the network operator (PLMN identity) is provided in the radio access network (RAN or BSS) to the mobile radio subscriber by transmitting more than one mobile radio operator identity, PLMN identity **[Page 3, paragraph 0040]**, in addition, Kauranen further teaches that the core network further includes a circuit-switched domain for processing, for example, voice calls and a packet-switched domain for supporting bursty, high speed data transfers such as, for example, e-mail messages and web browsing **[Column 3, lines 6-10]**. But Kauranen does not specifically teach that the PLMN identity is being transmitted in the Master Information Block (MIB) or in System Information Block 1 (SIB1), or in a mobile radio system operating according to the GSM standard on the System Information Type 3 (SI3). Park teaches a method and apparatus for interfacing among mobile terminal, base station and core network in mobile telecommunications system whereby a PLMN identity the RNC sends the system information message having a master information block (MIB) to the hybrid type asynchronous terminal over a BCCH **[Columns 21 and 22, lines 66-67 & 1]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the method of Park in the system of Kauranen in order to implement the GSM standard.

5. Regarding claim 31, Kauranen further teaches that network elements of the core network (Core Network, for example MSC and/or GSN) required for providing the

mobile radio services are separately provided by each of the mobile radio providers **[Figure 1, # 120]**.

6. Regarding claim 32, Kauranen further teaches that the method network elements of the core network are used for providing voice connections (MSC) **[Figure 1, # 120]**, whereas other network elements for providing IP connections (packet network, GSN) are each provided by the different operators **[Figure 1, # 124]**.

7. Regarding claims 35 and 36, Kauranen further teaches that when a connection is requested, the subscriber/the subscriber terminal notifies the radio access network of the different core networks or PLMNs with which the connection is to be set up **[Column 4, lines 38-44]**.

8. Regarding claims 37 - 40, Kauranen further teaches that when a connection is requested, the subscriber/the subscriber terminal notifies the radio access network of the different core networks with which the connection is to be set up, and that this notification occurs with the transmission of the network operator ID (for example PLMN ID) in the RRC CONNECTION REQUEST or the INITIAL DIRECT TRANSFER message in a mobile radio system operating according to the UMTS standard, wherein only the MCC of the PLMN identity is transmitted. **[Figure 3, Page 3, paragraphs 0041 & 0042]**.

9. Regarding claim 44, Kauranen further teaches that more than one mobile radio network operator ID (PLMN ID) is transmitted to a subscriber terminal in a mobile radio network operating according to the UMTS or GSM standard **[Page 3, paragraphs 0043]**.

10. Regarding claims 45-48, Kauranen further teaches that additional mobile network operator IDs (e.g., PLMN IDs) and hence of network operators, which the subscriber terminal is potentially permitted to use, and transmitted through dedicated signaling between radio access network or core network and the subscriber terminal **[Page 3, paragraphs 0040]**.

11. Regarding claims 50 and 55, Kauranen further teaches that at least one of the mobile radio networks comprises a core network element (MSC or GSN) for CS and PS connections and a radio network control unit (RNC or BSC), wherein one radio network control unit (RNC or BSC) is connected with more than one respective core network element (MSC or GSN) for CS and PS connections **[Figure 1, # 120]**.

12. Regarding claims 51 and 52, Kauranen further teaches one radio access network (RAN) is connected with more than one SGSN (for the PS domain), and one radio access network (RAN) is connected with more than one MSC (for the CS domain) **[Figure 1, #s 20, 22, 34 and 36]**.

13. Regarding claim 53, Kauranen further teaches the selection of the PLMN or of these core network elements (MSC or GSN) is based on signaling the selection by the subscriber terminal, in particular based on the signaled PLMN ID **[Figures 1 & 2, # 120; i.e. Figure 1, #120 shows one core network and Figure 2, #s 220-222 show three core networks, meaning that core network pieces 121-125 are also present in core networks 220-222]**.

14. Regarding claim 54, Kauranen further teaches that the provided single radio access network operates according to the UMTS, CDMA 2,000, or GSM standard **[Page 2, paragraph 0036]**.

15. Regarding claim 57, Kauranen further teaches the actual location to the mobile radio network is for moving subscriber terminals, through location registration procedures **[Figure 1, HLR # 125]**.

16. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication Number 2004/0162077 (Kauranen et al.) in view of U.S. Patent Number 6,741,868 (Park et al.) and further in view of U.S. Patent Number 6,119,000 (Stephenson et al.).

17. Regarding claims 42 and 43, Kauranen and Park has been discussed above with regard to claim 30. But Kauranen does not specifically teach that a signal represented, for example, by a single bit is transmitted on the organization channel (BCCH) of the radio access network to indicate if the radio network resources administration unit (RCN and/or BSC) provides the connection request of the subscriber/the subscriber terminal with one of the core networks based on the IMSI of the subscriber terminal ("default" selection based on the subscriber IMSI). Stephenson teaches a method and apparatus for tracking identity-code changes in a communications system **[Title]** whereby the IMSI of a subscriber is held in a subscriber identity module (SIM) that plugs into a mobile station. Each time the mobile station accesses the PLMN, the IMSI held in the associated SIM is provided to the PLMN (either directly, or indirectly in the form of a TMSI as will be explained below). The IMSI allows the PLMN to access the HLR where

the subscriber is registered to retrieve subscriber-specific data and to record the MSC in whose area the mobile station is currently located, according to context **[Page 3, paragraph 0027]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the method of Stephenson in the system of Kauranen in order to account for connections to foreign networks.

18. Claim 56 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication Number 2004/0162077 (Kauranen et al.) in view of U.S. Patent Number 6,741,868 (Park et al.), and further in view of U.S. Patent Application Publication Number 2002/0068565 (Purnadi et al.).

19. Regarding claim 56, Kauranen has been discussed above in regard to claim 46. But Kauranen fails to teach that the service is in the context of "PDP context activation". Purnadi teaches a new session or handoff methods in wireless networks **[Title]**, if a DRS (data ready-to-send) option in the Vendor Specific Extension field in the All Registration Request is not included, WGW (wireless gateway) initiates the GPRS Attach procedure immediately followed by GPRS PDP Context Activation **[Page 4, paragraph 0048]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the method of Purnadi in the system of Kauranen in order to implements the UMTS standard.

20. Claims 59-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication Number 2004/0162077 (Kauranen et al.) in view of U.S. Patent Number 6,741,868 (Park et al.).

21. Regarding claims 59-62, Kauranen has been discussed above in regard to claims 30 and 58. But Kauranen does not specifically teach that the PLMN identity is being transmitted in the Master Information Block (MIB) or in System Information Block 1 (SIB1), or in a mobile radio system operating according to the GSM standard on the System Information Type 3 (SI3). Park teaches a method and apparatus for interfacing among mobile terminal, base station and core network in mobile telecommunications system whereby a PLMN identity the RNC sends the system information message having a master information block (MIB) to the hybrid type asynchronous terminal over a BCCH **[Columns 21 and 22, lines 66-67 & 1]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the method of Park in the system of Kauranen in order to implement the GSM standard.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISAAK R. JAMA whose telephone number is (571)270-5887. The examiner can normally be reached on Monday-Thursday; 4-10.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IRJ/